NEW ENGLAND FARMER.

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Facts and Observations relating to Agriculture and Domestic Economy.

[BY THE EDITOR.]

ON THE USE OF SALT AS A MANURE. There exists a great difference of opinion with regard to the use of common salt as a fertilizer of soil. Some writers on the subject contend that it is highly beneficial, but others assert that its use is attended with little, if any advantage. Some declare it to be useful if spread on land in small portions, but affirm that its application in considerable quantities results in barrenness. A small quantity, it is said, accelerates putrefaction, and it is known that a large quantity prevents the putrefactive process. We shall offer to our readers some of the apparently contradictory facts and opinions of eminent philosophers and agriculturists on this topic, and conclude with some attempts to reconcile them, together with considerations which appear to us to be of importance in the use of this article as a manure.

In the early ages of the world, salt was regarded as the emblem of utter barrenness and desolation. And we read in Sacred Writ of princes, who to satiate their vengeance against their enemies, sowed grounds with salt to render them unfit for cultivation. (See Deut. xxix. 23. Judges ix. 45. Zeph. ii. 9.) Virgil in his Georgics, lib. ii. condemns a salt soil, as occasioning the degeneracy of fruit trees, and admitting of no amelioration from ploughing.

"Salt earth and bitter are not fit to sow
Nor will be tam'd and mended by the plough,
Sweet grapes degenerate there, and fruits declin'd
From their sweet flavorous taste renounce their kind."
Dryden's Translation.

Pliny, speaking of fossil-salt, affirms that every place in which it is found is barren, and unfit for vegetation. And Plutarch observes that the Egyptians believed salt to be the spittle or foam of the god Typhon, the great enemy of their gods; and hence he adds, they held it in great abhorrence.*

Not only the ancients but many of our modern practical agriculturists have given opinions not much in favor of salt as a manure. In a note appended to a paper, published in "*Memoirs of the Philadelphia Agricultural Society*," vol. ii. page 177, by Hon. Richard Peters, that gentleman observes "I have, in the early part of this season, [1810] spread salt in the way, and in the quantities recommended by Mr. Redd,† on every species of crop, both of grass and grain. We have had an unfavorable spring, owing to the long drought. I have perceived no effect good or bad, from all or any of the applications of salt. On my wheat I had some appearance of benefit, but it was not decidedly clear." In another volume of the same work, Mr. Peters observes, "It yet remains doubtful whether common salt is, or is not a manure, in its crude state. I have sometimes thought well of it; and used it every way. When mixed with putrescent substances judiciously, it is best. In large quantities it prevents, though in small portions it promotes putrefaction; being antiseptic in one case, and *septic* in the other. Lord Dundonald decides against the use of salt, especially on poor land: he says if it be at all useful it is on rich lands. He highly recommends *sea-water* for its great benefits in husbandy. It contains in a ton a bushel, or a bushel and an half of salt. Sea salt is recommended for the destruction and putrefaction of snails, slugs, grubs, worms and insects infesting grounds. They abound most in lands to which animal manures have been long applied. The vitriolic acid is equally efficacious; and I have therefore believed they do not much infest plastered fields."

Dr. Deane observed that "salt is of essential importance to the farmer as a manure. It may be applied to the soil, either by itself, or mixed and dissolved in compost. In the latter method I have found it to be a good fertilizer of land.

"But if salt be applied unmixed and undissolved, it will endanger the existence of tender plants.

"In June, 1786, I salted one bed of my onions, one bed of my carrots, and one bed of my early turnips; laying the salt under the surface, in the centres of the intervals, between the rows; at some distance, perhaps six inches from the plants, that the salt might have time to be dissolved and altered, before the fibrous roots should reach it. The carrots of the salted bed, evidently grew much larger and better than the rest of the carrots; but I could not perceive that the salt was at all beneficial to the onions or to the turnips.

"According to Mr. Ford's experiment in salting flax-ground, salt seems to be highly beneficial to that crop. He spreads the salt over the ground at the time of sowing the seed; and thinks that the quantity of salt should be double that of the seed. From three acres in flax salted, he had fifty bushels of seed, and an excellent crop of flax. It was thought that the advantage of salting appeared more in the seed than in the harle.

"Mr. Elliot speaks of five bushels of salt being applied to one acre of flax, which is a much larger proportion, and that it had an extraordinary effect; and also of a great crop of wheat being increased by salt."

The *Farmer's Assistant* says, "An intelligent Farmer once observed to us, that during our revolutionary war, when this article was so dear that he could not afford to give it to his cattle, his barn dung seemed to be of little service to his lands; but that he found the case much altered when he could again afford to deal out a sufficiency of it to his stock."

Sir Humphrey Davy says "when common salt acts as a manure, it is probably by entering into the composition of the plant in the same manner as gypsum, phosphate of lime, and the alkalies. Sir John Pringle has stated, that salt in small quantities assists the decomposition of animal and vegetable matter. This circumstance may render it useful in certain soils. Common salt likewise is offensive to insects.—That in small quantities it is sometimes a useful manure, I believe is fully proved; and its efficacy depends on many combined causes.

"Some persons have argued against the employment of salt; because when used in large quantities, it either does no good, or renders the ground sterile; but this is a very unfair mode of reasoning. That salt in large quantities rendered land barren was known long before any records of agricultural science existed. We read in the Scriptures that Abimelech took the city of Shechem, "and beat down the city, and sowed it with salt" that the soil might be forever unfruitful. Virgil reprobates a salt soil; and Pliny, though he recommends giving salt to cattle, yet affirms, that when strewed over land it renders it barren. But these are not arguments against a proper application of it. Refuse salt in Cornwall, which, however, likewise contains some of the oil and exuviæ of the fish, has long been known as an admirable manure. And the Cheshire farmers contend for the benefit of the peculiar produce of their country.

"It is not unlikely that the same causes influence the effects of salt, as those which act in modifying the operation of gypsum. Most lands in this Island, particularly those near the sea, probably contain a sufficient quantity of salt for all the purposes of vegetation; and in such cases the supply of it to the soil will not only be useless, but may be injurious. In great storms the spray of the sea has been carried more than fifty miles from the shore, so that from this source salt is often supplied to the soil. I have found salt in all the sand stone rocks that I have examined, and it must exist in the soil derived from these rocks. It is a constituent likewise of almost every kind of animal and vegetable manure."*

Sir John Sinclair observes that "sea-salt properly applied acts as a manure. It is particularly useful when mixed with a dung hill, or strewed over farm-yard manures, at the time when they are carried into the field. In Cheshire, refuse salt is found to be a most excellent manure for pasture land or fallows. By the application of only eight bushels per acre, in the month of October, on some rushy land, a most flourishing crop of rich grass appeared in the month of May. Mixed with couch-grass and other rubbish, and afterwards with other manure, it produced the most beneficial effects in a crop of barley, and on grass lands.

"In a series of experiments by the Rev. Dr. Cartwright with salt he found a mixture of salt and soot preferable to any other manure: a circumstance which might be attended with considerable advantages to farmers in the vicinity of large towns.

"It has been ascertained in America, and confirmed by the experiments of Mr. Lee of Enfield Wash, near London that salt is an excellent

* See Rees' Cyclopedia, Art. Salt.

† Mr. Redd's mode of applying it was to mix one bushel of salt with two bushels of virgin mould where fallen trees had lain and rotted, or from marshy land or slackened ashes. The compound dry and friable. The quantity three pecks of salt mixed in the compound so as to facilitate the strewing of it evenly. The time of application before vegetation begins in the spring.

* Elements of Agricultural Chemistry. Phil. Ed. p. 301, 302.

manure for flax. The quantity of salt should be double that of the seed used, and at the same time. It is probable that all oily seeds should be treated in the same manner.

"But the most important circumstance is the beneficial effects of salt, in preventing mildew. In the course of a most extensive inquiry into the causes of that disease in wheat, and the means of its prevention, it appeared that a farmer in Cornwall was accustomed to manure his turnip land with the refuse salt from the pilchard fishery; and that ground thus treated was never liable to mildew, though it infested all the neighborhood. This is a hint, which may prove of incalculable value, if in all cases it should prove equally effectual."

The Farmer's Journal, an English paper, states, in opposition to the theory, that salt will prevent mildew that a correspondent of the Editor had tried an experiment by sprinkling salt water on a small patch of wheat "but it had no effect in preventing the progress of the disease, and eventually the straw became quite black."

See *New England Farmer*, vol. i. page 148.

(TO BE CONTINUED.)

Massachusetts Agricultural Society.

FOR THE NEW ENGLAND FARMER.

REPORT No. IX.

The Committee on Agricultural Experiments submit for the consideration of the Board of Trustees the following, in addition to their Report dated the 16th of October last, to wit:

That Col. Joseph Valentine, of Hopkinton, in the County of Middlesex, is entitled to the Society's premium of $30, for having raised the greatest quantity of Indian Corn, being 127 bushels and 29-32 of a bushel, on one acre of land. Col. Valentine's description of his culture is as follows:—"The quality of the soil is a deep yellow loam, situated on a western declivity, and naturally moist. The land has been improved for mowing six years last past, and until the last year it has yielded very heavy crops. In July, 1822, the crop of hay falling below the produce of former years, I thought it expedient to stir the ground; in August following the ground was broken up, and in November it was harrowed, and cross ploughed. In the spring of 1823, it was again ploughed, and harrowed, and twenty loads of green barn manure spread equally over it, and ploughed in. It was then furrowed in rows about three feet and six inches apart, with a large horse plough, the plough going twice in each row to make a deep channel for depositing the compost manure, and also to leave the seed when planted lower than the general surface of the ground. The rows thus prepared, were filled with twenty loads of barn, hog-yard, and night manure, well mixed, and pulverized with Smithfield lime; the manure was then levelled, and the kernels of seed placed about ten inches apart widthwise, and four inches lengthwise in the row, and covered lightly with fine mould. The seed was the yellow twelve rowed corn, which was soaked in a strong salt petre brine twenty-four hours, and then spread, sprinkled with quick lime and raked over until completely coated with lime—it was ploughed twice, and hoed three times at the last hoeing, the first of July, the suckers were pulled out, and in the fore part of August the suckers were again pulled out, and the false stalks cut away. In hoeing the corn I was particularly careful to loosen the soil and remove the weeds without raising the earth about the stalks, as I had usually done—the stalks would average from nine to ten feet high, and were cut the first week in September. The first week in October the corn was harvested, and carefully measured in baskets by two of my men who had assisted in cultivating the crop. I directed the same men to take each of them a basket and fill it with ears in the same manner as when they measured the whole, and to shell and measure the quantity of shelled corn obtained from a basket of ears; the amount of shelled corn from each basket of ears was the same, viz., nineteen quarts; and when turned together and measured the result was one bushel and six quarts and a fraction over, from the two baskets. By computing the produce of the whole acre from the quantity of ears as measured in the basket, and the amount of shelled corn contained in a basket of ears, the result will be one hundred and twenty-seven bushels and twenty-nine quarts of shelled corn, weighing between sixty and sixty-two pounds to the bushel. The field in which the above acre was measured contains three acres; one half of which was planted with seed prepared as above stated; the other half was planted with seed prepared in its natural state. The corn in every part of the field came up well; and as the ground was all manured and cultivated alike, there could be no difference in the quality of the soil, to invite ro repel insects and vermin. But in that part which was planted with seed in its natural state, at least one sixth part of the blades were eaten off and destroyed by the worms, while in the part planted with seed soaked in brine and coated with lime, not a single blade was discovered that had been attacked by them. This is the first experiment I ever attempted to prove the utility of securing corn against the ravages of the worm by any process applied to the seed. Perhaps the mode above described and pursued by me, may not always be attended with the like success. It may, however, be the means of exciting the attention of others who have more leisure and ability than myself to discover and apply a certain remedy for so great a hindrance to the farmer. The value of the stalks and fodder I consider equal to one ton and a half of English hay—the entire expense of cultivating this acre of corn, including thirty dollars for the 40 cart loads of manure was fifty-five dollars and seventy-five cents." Col. Valentine is also entitled to the premium of $20, for having raised the greatest quantity of wheat, being thirty-seven bushels and one fourth of a bushel on one acre. "In the spring of 1822, it was ploughed and planted with Indian corn, forty loads of manure were spread and laid upon it, and the crop produced was one hundred and sixteen bushels and twenty-eight quarts of corn, well dried and fit for use. In the spring of 1823, as soon as the ground was fit for ploughing, I had it ploughed twice and harrowed; three bushels of Gilman wheat were sowed on one acre and a few rods, and ploughed in; I then sowed twelve pounds of clover, and half a bushel of herds grass seed, spread one hogshead of slacked lime upon the land, and harrowed it well twice with an iron harrow. The wheat before sowing was washed clean in clear water, then soaked forty-eight hours in strong lime water, then laid on a dry floor and slacked lime sprinkled upon it, and frequently stirred until it was covered with lime. Such was my practice with the seed. In the month of July I employed a Surveyer to measure the land on which the three bushels of wheat were sowed, and found it to contain one acre and a few rods over—the number of rods exceeding one acre were staked off, and the wheat growing thereon was reaped and threshed by itself; the produce was between one and two bushels—the acre was reaped and bound with long rye-straw, and found to be seven hundred and sixty-two bundles making fifty shocks and twelve sheaves; when threshed, winnowed and measured, the produce of the acre was found to be thirty-seven bushels and one fourth of a bushel—the quality of the grain was excellent, not a kernal of smut or burnt grain could be found, and the straw was perfectly clear and bright; the kernal was very large and full. Many persons have examined it who have been acquainted with the culture of wheat in the western country, and they pronounce it equal to the produce of the new land growth—its weight is sixty pounds to the bushel."

That Silas Pearson, of Newbury, in the County of Essex, is entitled to the Society's premium of $20, for having raised the greatest quantity of Barley, being fifty-two bushels and eighteen quarts upon one acre of land. "The entire lot contains one acre and fifty-three rods; the soil is a gravelly loam; in 1822, it was planted with potatoes, and manured with about twenty ox cart loads of compost manure to the acre, which produced a handsome crop—in April, 1823, it was ploughed plain and harrowed, the seed was then sowed and covered with a harrow, which took four bushels of the two rowed kind; the crop was mowed and threshed out in August, and the amount was seventy bushels, at fifty pounds per bushel."

That John Prince, Esq. of Roxbury, is entitled to the Society's premium of $20, for having raised the greatest quantity of Mangel Wurtzel, being 762½ bushels, on one acre. "The land was cultivated in 1822 with corn, potatoes, and winter squashes, in alternate rows, and 16 or 18 cart loads of compost manure (one half meadow mud) to the acre;—it is almost on the top of my hill, is gravelly loam, or a hard pan bottom, inclining to the S. S. E.; this season 24 cart loads of the same kind of compost manure were spread on the whole flat, and ploughed in, then harrowed flat, and a common marker made the furrows about two inches deep, and two feet apart, the seed was dropped about 5 or 6 inches apart, and covered up on the third of May,—from the 11th to the 16th of June, they were hand hoed, weeded, and thinned out to 10 or 12 inches apart—on the 1st of July a second and last hoeing and weeding—in August and September were too thick, some were drawn for hogs—and in October, by measurement, one hundred and twenty bushels were drawn on one end of the field:—and on the 4th and 5th of November the whole crop was drawn and carted to the barn cellar, and part were pitted in the field, as described in the Massachusetts Agricultural Repository, No. 3. vol. vi. particularly those intended for seed the next season. Eight rows on one side, and the whole length of the field, was the sugar beet, from seed I imported two years since from France, and am much pleased with them; I think they produce fully as much as the mangel wurtzel, weigh 5 or 6

lbs. per bushel heavier; and contain more saccharine matter than any vegetable we cultivate; I therefore intend next year to cultivate largely of them; and also to raise much of their seed from very fine roots selected for that purpose, and such as I sent to the Society's Hall on the day of the late Cattle Show; very many of both kinds weighed 12 and 14 lbs. each. I weighed about seventy baskets of the mangel wurtzel to give me a fair average of the crop, having filled the carts as nearly equal as possible, and the produce was 54,458 lbs. which at 56 pounds, make 972¼ bushels on one acre and forty three rods of land, as appears by the surveyor's certificate herewith transmitted—the entire expense of cultivation was $60 and 14-100; at this rate each bushel costs a little more than 6¼ cents, and the produce 42,920 pounds, or 762½ bushels per acre.

In the same field, and directly alongside, potatoes were cultivated, which fell considerably short of two hundred bushels per acre—the labor in gathering potatoes, is much more than the mangel wurtzel; and on the whole, cultivation about equal. I think one bushel of potatoes about equal to one and a half of mangel wurtzel for feeding animals; the same might be allowed of carrots for milch cows, for other animals not somuch; all cattle are fond of mangel wurtzel; they are not subject to be attacked as the ruta baga by the fly in seed leaf, or the cabbage louse, which sometimes destroys whole crops,and they give no bad flavor to milk–ont he the whole, after 5 or 6 years cultivation of the mangel wurtzel, I feel convinced it is the most profitable root to cultivate for consumption on a farm, and the past season mine kept perfectly well till June."

That Messrs. Tristram and Henry Little of Newbury, are entitled to the Society's premium of $20, for having raised the greatest quantity of turnips, being nine hundred and eight bushels, on one acre. "The lot is on the north side of a small swell on our farm in said town, the soil is a yellow loam, or a gravelly bottom, and had been down to grass two years; in July 1823, the lot was mowed and the hay made on the same land, and the produce was one ton and eight hundred; the sward was then ploughed as deep as would turn over, and twice harrowed, furrows were then opened at the distance of three feet apart, ten ox cart loads of manure, mixed with ten loads of marsh mud, or sod, was put into the furrows, which were covered with a plough, one pound of seed was sowed with a machine, one row on each ridge, and a roller was made to pass over the same, which completed the sowing; as soon as the third leaf was grown, they were thinned to the distance of one foot apart in the rows, after that they were three times ploughed between the rows, and twice hoed; the harvesting was in November, and the product was nine hundred and eight bushels. The labor of cultivating and harvesting the above crops, exclusive of hauling them to market, for they were all sold, was for the hay two days work, and for the turnips twenty-six and a half days."

Messrs. Tristram & Henry Little also claim the premium of $20, for raising the greatest quantity of common turnips, after any other crop in the same season, having raised nine hundred and eight bnshels on one acre, and the same is awarded to them.

Claims for premiums were also exhibited to your Committee, by the following persons, for raising the greatest quantity of Indian corn on one acre of land, to wit: Messrs. Tristram & Henry Little, of Newbury, raised 115 bushels and 1 quart; Mr. John Lees, of do. 113½ bushels; Mr. Fitch Winchester, of Southboro', 102 bushels and 17 quarts; Gen. William Hull, of Newton, raised 113 bushels of corn on one acre and twenty five rods—Gen. Hull sent to your Committee some fine ears of corn, taken from stalks cut from his field early in September last, before there was any frost, and while corn was in the milk;—"in the last of October the corn was found to be perfectly ripe, and sound, and the stalks sufficiently cured to be packed in the mow." The result of this experiment appears to be highly satisfactory, and Gen. Hull and your Committee recommend that his communication on the subject be published in the Society's Journal. Mr. Joseph Little, of Newbury, raised 636 bushels of common turnips on one acre. Mr. Benjamin Savory, of Byfield, raised fifty bushels of spring wheat on one acre and 146 rods. Mr. Ebenezer Gates, of Worcester, raised fifty-five bushels of winter rye on one acre and 130 rods; no premium was offered the present year for raising the greatest quantity of rye, but your Committee are induced to recommend that the Treasurer be authorized to pay said Ebenezer Gates, the sum of $20.

For the most satisfactory experiment to ascertain the best mode of raising Indian corn, whether in hills or in rows; for raising the greatest quantity of vegetables, grain, peas, and beans excepted, for winter consumption of the stock on his own farm, and not for sale;—for raising the greatest quantity of winter wheat on one acre; for raising the greatest crop of millet on one acre, cut and cured for hay; for raising the greatest quantity of carrots, not less than 600 bush. on one acre; for raising the greatest quantity of potatoes on one acre, not less than 500 bush.; for raising the greatest quantity of common beets on one acre, not less than six hundred bushels; fos raising the greatest quantity of parsnips on one acre, not less than 400 bushels; for raising the greatest quantity of ruta baga on one acre, not less than 600; for raising the greatest quantity of onions on one acre, not less than 600 bushels; for raising the greatest quantity of cabbages on one acre, not less than 25 tons weight, free from earth when weighed; for the most satisfactory evidence on soiling cattle, not less than six in number, and through the whole season, together with a particular account of the food given, and how cultivated; for making the experiment of turning in green crops as a manure, on a tract not less than one acre, and proving its utility and cheapness, giving a particular account of the process and result; for proving by actual experiment the best season and mode of laying down lands to grass, whether spring, summer, or fall seeding be preferable, and with or without grain on different soils; for raising the greatest quantity of dry peas on one acre, not less than 30 bushels; for raising the greatest quantity of dry beans on one acre, not less than 30 bushels; for giving proof of having produced the largest quantity of dressed flax, raised on half of an acre, not less than 250 lbs.; for taking up in one season, on his own farm, the greatest quantity of honey, and shall at the same time exhibit superior skill in the management of Bees; for proving by satisfactory experiments to the satisfaction of the Trustees the utility and comparative value of the cobs of Indian corn, when used with or without the grain itself, ground or broken—No claims for premiums have been exhibited.

For the Committee,
THOS. L. WINTHROP, *Chairman.*

Boston, Dec. 13, 1823.

Mr. H. G. Dyar's Rotatory or Endless Lever.

It is with pride and pleasure we have examined this young gentleman's Inventions—His unaffected modesty will insure to all his visitors, a polite and liberal reception; and he would, we know, esteem it a favor from all those who may entertain any doubts of its principle, power, or applications, to state them to him, that he may have the satisfaction, of at least attempting to dispel them. The application of this power to Horology, already stands before the public, in the demonstrable shapes of two Time Pieces, and a watch. We need not say more in recommendation of them, than, briefly to state, that the usual number of wheels are reduced by it to two. The chain and fuse are dispensed with. In consequence of its rolling action the friction is removed. A Watch with the usual spring will go eight days; a Clock, a year with a third weel and with a fourth, a century, and will indicate the time to the 100th part of a second; and their simplicity will consequently reduce their first cost and annual tax for cleaning and repairs.

It would be unnecessary here to detail the several further improvements Mr. D. has introduced in Horology; enough has been said to show the importance of this truly great and valuable invention, in its particular application to this single branch of Mechanics.

It is upon the general application of this new and powerful Lever to all Machinery, where the tooth and pinion have heretofore been used, that the inventor founds his principal claim; and we are glad to find that he has secured it by patent rights, not only in this country,but inEurope, and we doubt not he will reap ample fruits from his labor and ingenuity. He has intimated, we believe, his ability to construct, by the power of his lever a simple Engine capable of drawing up any ship out of the water for examination and repair. Sure this would be an establishment of much value in this great commercial city, as well as profitable to its proprietors. What can we say of a power, which can itself be moved with a breath, yet may be made to raise with ease a ship from its element; but that its general usefulness must be very extensive, and entitle it one of the first inventions of the age. Mr. D. by taking apart his twelve month clock exhibited to us a beautiful specimen of this power, which very clearly defines its action. B.

Centinel.

Highway Robbery.—Rufus G. Amory, Esq. of Boston, was robbed near New Brunswick, in N. Jersey on the evening of the 16th inst. Mr. A. was attacked by two foot pads, bound to a tree, and robbed of $470, his horse, a valuable gold watch and a part of his clothes. Mr. A. succeeded in unloosing the cords, which bound him and reached a house in safety.

An Address of the Trustees of the "Gardiner Lyceum."

Ten months have passed since the Gardiner Lyceum commenced its operations. Its success, considering the novelty of its plan, has not been small, and the Trustees regard it as an earnest of success, equal to their warmest anticipations, when the plan shall have become more fully and generally understood.

An address was circulated about a year ago, giving some account of the plan, and as that address has excited an extensive interest to see a fuller developement of it, it is thought expedient to publish another, in which can be given the result of more mature deliberation, and of some experience.

The whole course, it will be recollected, was fixed at three years. Students are not required to remain during the whole of this period, but can leave at any time, when their circumstances shall render it expedient. They can likewise be admitted at any time, provided they are qualified to enter one of the existing classes, and in the examination of candidates for an advanced standing, such studies will not be insisted on, as are not necessary to pursuing the subsequent parts of the course. Occasionally persons may be permitted to join a class in a particular study, as chemistry, e. g. without having gone over the preceding parts of the course, if they give evidence of other sufficient qualifications.

The studies of the first year will be the same for all; after which, they will be varied, if necessary, to accommodate the wants of individuals. No studies, however, will be pursued at the Lyceum, which will not be profitable for all of those classes of citizens, for whose accommodation it is established.

The first year is devoted chiefly to Elementary Mathematics, which form a proper foundation for the course of study, from the very many and important relations, which they have to the Arts and Sciences, and from their furnishing, in an eminent degree, that mental discipline, which is more than half the object of every system of education. The mathematics, used at present, comprehend most of the course, which has recently been selected and translated from the works of the most eminent French mathematicians, for the use of the students at the University at Cambridge.

The following is the arrangement of the studies.

THIRD CLASS.

Geography, including the study of maps and globes.

Arithmetic, which has been hitherto pursued with Colburn's Sequel as a text book, but hereafter the Arithmetic of Lacroix will be used in consequence of its connexion with the succeeding parts of the course.

Book-keeping, which is to every man in business of the highest consequence, and to every one important.

These studies will take up the *first* term.—During the *second*, will be studied

Algebra; a science, which is useful in a high degree, as it furnishes demonstrations of the most important rules of Arithmetic, and gives the means of solving many useful questions, which are beyond the reach of Common Arithmetic. Its conclusions derive great value from this consideration also, that they are general, and the solution of any particular problem gives not only the individual result sought for, but a rule, expressed in the best possible way for solving directly all other problems of the same kind. Algebra is absolutely necessary to those, who would make any attainments in the higher Mathematics and Mechanics, as it is the introduction to all the Analytical Sciences.

Legendre's Geometry, and *the Trigonometry of Lacroix*. These sciences are the foundations upon which rest the Mensurations of Superficies and Solids; of Heights and Distances; and of all the Calculations of the Surveyor, the Navigator, and the Astronomer.

These studies will occupy the *second* term, and be continued in the *third*, till finished.

Besides these, in the *third* term, Blair's Rhetoric abridged, will be taught, and the Studies of the year reviewed.

Through the whole year, there are recitations on Monday morning in Scripture history, and exercises in reading and English grammar.

SECOND CLASS.

First Term.—*Bezout's Application of Algebra to Geometry*, and the Application of *Trigonometry* to *Surveying and Navigation.*

Chemistry, which teaches those laws of nature which lie at the foundation of many of the most important arts of life.

Hedge's Logic.

The studies of the *second* term will embrace *Mechanics;*

Smellie's Philosophy of Natural History.

Davy's Agricultural Chemistry may here be studied by those, who intend to devote themselves to Agriculture, and others, whose pursuits in life, may have other relations with Chemistry, will pursue their studies in books suited to their object, as, for instance, the future dyer, will study such works as Bancroft's Philosophical Treatise on Colors, and Cooper's on Dyeing.

Those who wish to qualify themselves for practical Surveying, will be instructed to perform actual surveys, for which the Lyceum is amply furnished with instruments; and nautical calculations and observations and the use of nautical instruments will be taught to the intended navigator. Those, who would qualify themselves for millwrights, or for any of the departments of Engineering, will here be directed into a course, especially adapted to their object.

The studies of the *third* term will include, *Hydrostatics* and *Pneumatics*, or the laws of fluids elastic and non-elastic.

Review the studies of the year.

Beside the studies above mentioned, there will be regular exercises in English composition, and Monday morning recitations in Paley's *Natural Theology.*

FIRST CLASS.

First Term.—*Natural Philosophy.*

Smellie's Philosophy of Natural History, finished.

Stewart's Philosophy of the Mind, vol. I.

Second Term.—*Natural Philosophy.*

Conversations on Political Economy.

Stewart's first vol. concluded.

Third Term.—Collection of Essays, under the title of the *Federalist*, written by Mr. Madison, Mr. Hamilton and Mr. Jay, in defence of the American Constitution.

Review of the studies of the year.

Through the year, Monday morning recitations from Paley's *Evidences of Christianity*, and exercises in English composition.

As some knowledge of *Fluxions* is necessary to those, who wish to pursue their studies extensively in the higher Mechanics, to such it will be taught in continuation of the mathematical course.

Such works as Stewart's Philosophy, Conversations on Political Economy, and the Federalist, are introduced into the last year of the course, from a conviction, that no study can be more important to man, than that of himself, and of that part of his nature especially, which distinguishes him from inferior animals;—that it is important to every citizen of a free government, to have some knowledge of the principles of political economy;—and that to every American it must be interesting to study under the guidance of some of its ablest defenders, that constitution which binds together the former Colonies of a foreign power, and has consolidated them into a great and independent nation.

It will be seen at once, from the remarks above made, that the course which will be pursued, cannot be minutely detailed, as it must often be subject to variations, from the necessities of students, arising from the nature of the object they have in view and the pursuit for which they wish to be qualified. These objects and destined pursuits of the students will everbe attended to, and no one will be obliged to study that, which will not be of material service to him. The Farmer will not be put upon studies, which are important only to the Mechanic, nor the latter upon those which are of peculiar interest only to the former. This separation of studies, and the distribution of them according to the wants of the students, will be carried into effect, as far as the existing state of the institution will admit. Regularity however, and system will be preserved as far as possible. When there are several, who are under the necessity of leaving the common course, and their studies take the same direction, they will form a class, and if a suitable text book can be found, recitations will be had as usual. But in most cases, particular studies, such as the application of Chemistry to the individual Arts, will be pursued by one or two only, and suitable books for recitation can rarely be had. Such Students must pursue such a course of reading as will be pointed out to them, and will be assisted by frequent examinations, and Explanations, and will have when necessary the liberty of privately experimenting. This course of separate instruction will be often necessary in the applications of Mathematics and Chemistry.

Beside the recitations, it is intended to have two full courses of Lectures to the two first classes. The following hints of them, are given, to show their nature, and the subjects they will embrace. These lectures will not be confined to the students, but will be open to all, who may wish to attend.

I. Chemical Course, which will include,

1. A course on the principles of *Chemical Science*, together with such subjects as are usually introduced into a chemical course.

2. Lectures on *Agricultural Chemistry*, in which will be considered the organization and

chemical constitution of plants; the phenomena of vegetation; the constituent parts and analysis of soils, and their improvement; manures, vegetable, animal, and mineral; the use of burning and fallowing, and other agricultural objects connected with chemistry.

3. Lectures on *Dyeing*, in which the nature and preparation of Colors, and the use of mordaunts will be explained, &c.

These will be followed by lectures on *bleaching*:—on the manufactory of *pottery* and *porcelain*, with their *glazings*, &c.:—on the preparation of *cements*:—on *tanning*:—the manufactory of *pot* and *pearl ashes*:—of *glass*:—and on those other mechanical arts, connected with chemistry, which are most practiced, and of the greatest importance.

II. Mechanical Course.

1. Statics; the mechanical powers; the descent and *collision* of bodies, and the vibration of pendulums; the maximum effect of machines, and other subjects belonging to common mechanics.

2. Mechanical agents; the elementary parts and construction of machines; the regulation of machinery; friction.

3. Dynamics; which treats of the action of forces, when they give rise to motion.

4. Hydrostatics and hydraulics; water wheels hydraulic machinery.

5. Mechanical properties of air, and other elastic fluids; pneumatical engines; pump; steam engine.

Description of some of the most important machines with the theory of their operations.

Carpentry; strength of timber and other materials; equilibrium of arches; civil architecture.

8. Mechanical principles, upon which agricultural implements are constructed.

Besides the above, a course on Mineralogy is contemplated, which will embrace such parts of the science as are of greatest practical value. The extensive importance of minerals in furnishing manures, paints, and glazings for wares, and their use in dyeing and a thousand other arts, render some knowledge of mineralogy highly important in a country, which will doubtless prove rich in mineral treasures.

A short course will also be given on the different branches of experimental philosophy, Magnetism, Electricity and Optics, and upon Astronomy.

The Trustees have been always desirous of having a farm connected with the institution, upon which, the students, whilst enjoying salutary exercise, might practically acquire such a knowledge of agriculture, as would be of use to them through life, and at the same time, enable them in an honorable way, to discharge, by their own exertions, part of the expenses of their board. This object they hope soon to be able to accomplish. A donation of a small but valuable piece of land, has recently been made to the institution near the Lyceum, well adapted to agricultural experiments; and at a late meeting of the Trustees and visitors, it was voted in both Boards to be expedient, that a Professorship of agriculture, of botany and of chemistry as applied to the arts should be established, the professor to enter upon the duties of his office, as early in the ensuing spring, as the funds of the institution will allow. For these funds, the institution is dependant upon public patronage. Nor will they, it is believed, be withheld from the only institution designed to give appropriate instruction to the farmer, the mechanic, the navigator and the merchant, while liberal provision has been always made for educating young men for the learned professions.

Before venturing to commence a plan, which the projectors were sensible was far too great for their means to carry into successful operation, they stated in their petition to the legislature for an incorporation, what they had been able to do towards the object, but that their exertions alone would be unable to effect it, "and that they must rely upon the patronage of the State for the power of carrying this plan into effect, notwithstanding the exertions they have already made."

The Legislature, the last winter, made to the institution a donation,* which enabled it to continue its existence, and to purchase part of the books and apparatus, which were indispensably requisite. The committee of both houses of the Legislature, who had the subject under consideration, were satisfied, that a much larger sum was requisite to enable the institution to go fairly into operation, and the bill, as passed by the Senate, gave the tax upon the Gardiner bank for three years; but the house, with a caution, becoming in those, who are the constitutional guardians of the public purse, reduced the term, for which the tax was granted from three years to one, so that while the institution might not be deprived of what it could realise in the ensuing year from the grant as passed by the Senate, it would be obliged to apply to the next Legislature, and the grant might then be continued or withheld, as the institution should prove itself worthy or otherwise of the public patronage.

Another instructer having become absolutely necessary, it was deemed by both boards highly important that this additional instructer should be a permanent professor of agriculture, under whose superintendence, the farm which they had always contemplated, might be carried into operation, rather than a temporary assistant. In establishing this professorship in connexion with a farm the Trustees believe, that they shall render an important service to the agriculture of the State. As however, it must be a year or more before the land designed for the farm can be brought into a state fit for agricultural experiments, the Trustees wish to mature their plan fully and have it approved by the visitors, before they lay it before the public. They now give hints of their design, which will be modified as found expedient. The principal objects which the Trustees have in view, in establishing the professorship in connexion with a practical farm are—1st, To give to the future agriculturist the knowledge of those principles of science upon which his future success depends, and to let him see them reduced to practice. 2d, To furnish a beneficial employment as recreation. 3d, To diminish the expenses of board; and 4th, To try a series of agricultural experiments adapted to the soil and climate of Maine. These experiments will be tried by the students, under the direction of the professor, and will be conducted with as much care and accuracy, as the nature of the case will admit.

It would be endless to point out the various experiments which might be pursued upon such a farm, calculated to furnish important results. It is the intention of the Trustees that the labor done by the students should contribute to diminish their expenses. This object will be more easily accomplished whenever they shall be able to have a building on the premises for the students to lodge and board in. The labor on the farm will be altogether voluntary. No student will be obliged to work unless he chooses, but it is presumed that even those, who do not intend to become farmers, will find the labor on the farm a pleasant occupation, independent of every other consideration, and in a moral point of view, the substitution of a pleasing occupation, connected with the highest utility, for the idle sports of their age, cannot but have an important influence on their future character in life.

The Trustees hope to be able to provide some suitable employment for those young men, who may attend the institution with a view of becoming mechanics, by which they may be enabled to discharge their expenses.

Another object of the Trustees is to collect the best models of useful tools and machines. A room will be appropriated to these models, where they will be properly arranged and open to the inspection of the public, and the Trustees take this opportunity of thanking those gentlemen who have already presented them with models of their inventions. The advantages, which would accrue from such an establishment are highly important, but must be obvious.

In conclusion, the Trustees will only add, that, as public good was the sole motive for establishing the Lyceum, so it is the governing principle in all their measures. The whole plan has been arranged with a single reference to the wants of the public, and encouraged as the Trustees have been by the patronage they have already received, by the full approbation of gentlemen, distinguished not only for science but for practical views, and by the interest which is kindling through our widely extended country in the improvement of Agriculture, Manufactures and the Arts, they cannot but hope that the first school, which has been established for the express benefit of the Farmer and the Mechanic, will not be permitted by an enlightened public to languish for want of encouragement and support.

R. H. GARDINER, *per order.*

Gardiner, Me. Nov. 1823.

* The donation was one thousand dollars from the State Treasury and the tax upon the Gardiner Bank for one year amounting to another thousand dollars.

Reports of the several Committees of the Worcester Agricultural Society.

REPORT No. III.

Committee on Sheep.

Nathaniel P. Denny, of Leicester, *Chairman*; James Wilder, of Sterling; Willard Rice, of Spencer.

The Committee on Sheep are happy in being able to state, that the exhibition of fine-woolled Sheep the present year, far exceeds that of any preceding year.

The views of our yeomanry are approximating to the high estimation to which these invaluable animals are entitled. Their utility, however, is not as yet sufficiently appreciated; [illegible] this

is done, we may expect to see a handsome revenue collected from the importation of wool, or the agriculturist encouraged to supply our own markets. In either event the benefit redounds to ourselves.

Your Committee are apprehensive that the finest and best woolled Sheep have not been offered for premium, owing to an erroneous idea in the growers of wool, that the appearance of the animal is as important in the view of the judges, as the fineness of the fleece; when the fact is, the finest woolled Sheep are often the most ordinary in appearance, and at the same time are the best entitled to the approbation of good judges. It is hoped a reformation in this particular will soon be effected, and the laudable strife will be who can grow the finest fleece. To this period our manufacturing brethren are looking, with the fond hope that they will be able to vie with the most approved manufactures of the old world.

The exhibition of sheep has been so excellent, the Committee have found it somewhat difficult to decide to whom the premiums should be awarded: but, upon diligent examination and comparison, they have come to the conclusion,

That the premium of $10 be awarded to Bezaleel Taft, jr. Esq. of Uxbridge, for the best Merino Ram; to Joseph Thayer, Esq. of Uxbridge, for the 2d best, $5; to the Hon. Aaron Tufts, of Dudley, for the four best Merino Ewes, $10; to the Hon. Salem Town, jr. for the four next best, $5; to Bezaleel Taft, jr. Esq. of Uxbridge, for the two best Merino Weathers, $4; to Rejoice Newton, Esq. of Worcester, for the six best Mixed Merino Sheep, $5; to Asa Rice, of Worcester, for the four best Native Sheep, $4; to Holland Maynard, of Northborough, for the best Native Ram, $5.

All which is submitted.

NATHANIEL P. DENNY, *per order.*

From the American Farmer.

GRASSES.

(*Continued from p.* 163.)

Long-rooted clover, is a native of Hungary, and I do not think has ever found its way across the Atlantic. The root is biennial, and if sown in the fall, lasts only during the next season. It penetrates to a great depth in the ground, and consequently is but little affected by drought. It, therefore, requires a deep dry soil. The product of this grass, when compared to others that are allied to it in habit and place of growth, proves greatly superior. It affords twice the weight of grass, and more than double the nutritive matter, that is given by the common clover. It gives abundance of seed; and, says, G. Sinclair, "if the ground be kept clean of weeds, it sows itself, vegetates, and grows rapidly, without covering in, or any operation whatever. Four years it has propagated itself in this manner, on the space of ground which it now occupies, and from which this statement of its comparative value is made." This species would, no doubt, prove a valuable acquisition to our husbandry, whether we consider its value for green food, hay, or as a green crop to be turned in preparatory to grain.

Sain Foin is peculiarly adapted to a calcareous or chalky soil. It is true it is cultivated in Norfolk, Eng. which is a soil of sand and loam, naturally destitute of calcareous matter. But it is common, there, to dress their lands with clay marle, which abounds with carbonate of lime; without which dressing, says Young, Norfolk soils will not grow Sain Foin. This writer considers it "one of the most valuable plants that were ever introduced into the agriculture of Great Britain." The well known Mr. Coke cultivates 400 acres of this grass, and sows it without other seeds. Several attempts have been made to cultivate sain foin in this country, but hitherto, I believe, without success.

Timothy. This grass is distinguished in Great-Britain by the name of *meadow cats-tail*; in New England by that of *herds-grass.* The table shows that it is one of the most valuable grasses that are cultivated.—and, what is worthy the notice of every farmer, that it affords *more than double* the nutriment when cut in the seed to what it does in the flower. In tenacious, strong and moist soils, it is entitled to a precedence, perhaps, to any single grass for hay; yet, for the reasons does not seem to be suitable for mixing with clover seeds, when intended for meadow. Another consideration which renders it particularly worthy of attention is the seed which it affords, and which may be saved without materially diminishing the hay crop. From ten to thirty bushels of seed, may be taken from an acre of timothy, which at the price it now bears, is of itself, a handsome remuneration.

Fiorin,—has of late years been brought into notice in Great Britain, by the experiments and recommendations of Dr. Richardson; who particularly recommended it for the cold, boggy soils of the mountainous districts, where ordinary grasses would not thrive. The peculiar value of the fiorin, and of other grasses of the *agrostis* family, arise from their fitness for *winter pasture:* as they lose very little of their bulk or nutriment by remaining on the soil after they have ceased to grow. Its name (*creeping bent, or couch grass*) implies a difficulty in mowing it, except on a surface perfectly smooth. We have seen it frequently recommended to the notice of American farmers; but from the very limited progress which seems to have been made in its cultivation, we infer that it has fallen short of public expectation.

Upright bent grass. Dr. Muhlenburgh considers this the *herds-grass* of the southern, and the foul meadow of the eastern states of which *white-top* and *red-top* are varieties. The small weight of hay, and of nutritive matter, afforded by the *agrostis stricta* in the table before us, shows that this grass is more congenial to our climate than to that of England: for, in both quantity and quality, our foul meadow and red-top seem to approach our favorite timothy. In my boggy soils, both varieties of this grass have come in spontaneously, as soon as the ground has been cleared and drained, have soon formed a compact sod, and afforded good hay and good pasture.

American Cocks foot, is wholly unknown to me; and I have not been able to learn much from enquiry as to its merits. M'Mahon calls it the *swamp* cock's-foot; and says it grows well in swamps and moist soils. As it is a native grass, and appears to afford an abundant crop, it is to be hoped that some one acquainted with it will bring it into further notice.

Flat stalked meadow grass. This, according to Muhlenburgh, is the *blue grass* which is considered a pest in many of our tillage grounds. The small crop which it gives, and the little nutritive matter which this affords, shows the little dependence which ought to be placed upon it for grazing or hay.

Reed meadow grass, otherwise *water meadow grass*, is not natural to our country. As it affords a great burthen of hay, and is withal, rich in nutriment, it might be a valuable acquisition to our swamp grounds, which constitute its favorite soil.

Smooth stalked meadow grass, is a native plant, and is well adapted for permanent pastures. It grows quick after being cropped, and does well upon dry grasses.

Floating Fescue grows well in swamps and bog soils, where good kinds are most wanting.

I would suggest, with much deference, whether grasses may not be divided for the *practical* benefit of farmers, into three kinds, to wit.—Cultivated grasses, meadow grasses, and pasture grasses;—and whether these may not be again subdivided to suit different soils and localities. I will illustrate my project, by attempting a classification, of the grasses enumerated in the preceding table, from the data which it affords, and the practice of judicious farmers;—and

1st. *Cultivated grasses.* All kinds, strictly speaking, which the soil does not produce spontaneously, are cultivated grasses: But the term, as generally used, and in the sense I here employ it, applies only to such as are sown to *alternate with grain, pulse and roots, in a systematic rotation of crops.* The grasses selected for this purpose, are generally the Red-clovers, Lucern, Sain Foin, Orchard, Tall oat, Timothy, or Rye grass. Clover is the primary dependance on all soils which will grow it, and particularly where gypsum can exercise its magic powers. As vegetables are said to exhaust the soil, in proportion to the smallness of their leaves (the larger their leaves, the more nutriment they draw from the atmosphere, and the less from the soil) clovers are entitled to the high commendation they have obtained among American farmers. But as these plants are liable to premature destruction by the frosts of winter, it is both prudent and wise to intermix with their seeds those of some other grass more to be depended on. For this purpose,

On sands, loams, and gravels, and these constitute the soils usually employed in convertible husbandry, the orchard grass, or tall meadow oat grass appear to be best calculated to ensure profit. They grow early, delight in a clover soil, and are fit for the scythe when clover is in the bloom, the time it ought to be cut. The hay from this mixture may be made before harvest commences; and, if the soil is good, a second crop may be cut almost equal to the first. If intended for pasture the second year, either of these grasses will afford more abundant food than timothy.

In clays, the meadow fox-tail, an excellent grass, might be substituted, though, according to Sinclair the tall oat grass will do well here also. *In wet soils*, where clovers do not grow well, timothy and meadow reed grass would be good selection, sown either separate or together.

Lucern and sain foin require a deep dry soil, and are generally sown without other seeds. The first does not attain to perfection before

the third year; and both, where successfully cultivated, are permitted to occupy the ground from six to eight years.

2d. *Meadow grasses.* In selecting these, the object is to obtain the greatest burthen of good hay, and to mix those kinds which may be profitably cut at the same time.

For clayey and moist soils, many valuable and nutritious kinds seem to be well adapted, that is to say, Meadow Fox-tail, Timothy, Tall oat, Meadow soft grass, floating Fescue, Rye grass, Reed Meadow, Smooth stalked meadow, American Cock's foot, upright bent or Herds-grass, and Tall Fescue. And the five last are peculiarly suited to swamp or *bog soils*. For *dry loams, sands and gravels*, which never ought to be kept long in grass, the cock's foot, or orchard grass, and tall oat, are probably the best; and to these might be added, red and white clover.

The great difficulty is to prevent the deterioration of meadows. This takes place from the better grasses running out, and giving place to courser kinds, in moss and to useless or noxious plants; aided often by a neglect to keep them well drained. The finer and more nutritious kinds thrive best in *moist*, though they will not live long in *wet* soils. Hence it is of the first importance to keep the surface soil free from standing water, by good and sufficient ditches; and it often becomes necessary, and it is in most cases advisable on a flat surface, to lay the land in ridges, at right angles with the drains. Another precaution to be observed, is not to feed them with stock, when the soil is wet and poachy. Harrowing in the fall, has been found beneficial to meadows. It destroys mosses, and covers the seeds of grasses which have fallen, or may be sown, and thus produces a continued succession of young plants. In Europe, lime is used with good effect as a top dressing to grass lands, as are also ashes. With us, the annual application of a bushel of gypsum to the acre is found highly beneficial. It not only thickens the verdure with clover, but is of advantage to most other grasses. Stable manure should be applied only when it can be spared from the more profitable uses of tillage. When the means above enumerated fail to insure a good crop of hay, it is time to resort to the plough and a course of crops.

3d. *Pasture grasses.* But few of the grasses most valued in Great Britain for pasture, are the natural growth of the United States; but it is believed, that if the seeds are once introduced upon our farms, we shall find little difficulty in naturalizing them. Neither the orchard nor vernal grass, which are said to be indigenous to our country, are recognized in the grass lands which have come within my observation: yet they constitute, with fox-tail and tall oat grass, the earliest and most valuable varieties for perennial pastures. The meadow fox-tail, and orchard grass, together with our white clover and green meadow grass *poa viridis* (which seldom require to be sown) I think would form the best selection for all grounds which are moderately dry. The rye and oat grasses, or meadow soft grass, might be either substituted for the two first, or combined with them. These would afford spring, summer, and fall feed, abundant in quantity, and wholesome and nutritious in quality. On wet soils (though pastures require to be drained as well as meadows, to insure a rich herbage) the Tall Fescue, Smooth stalked Meadow, Upright bent or Herds-grass may be introduced to advantage. Gypsum is applied to pastures with the same benefit that it is to meadows.

I will conclude this already tedious communication with a request, that you will confer on me a particular favor, by forwarding, if to be obtained in your city, a small parcel of seed of the Meadow Fox-tail, Tall Fescue, Hungary clover, and American Cock's foot, or either of them care of Thorbern & Son, New York. I have the Tall oat, Rye grass, Orchard grass, and Lucern growing. Most of the other grasses that I esteem valuable are already among us.

J. BUEL.

NEW ENGLAND FARMER.

SATURDAY, DECEMBER 27, 1823.

We must apologize to our readers for omitting in this paper our summary of foreign and domestic intelligence and a part of our Congressional matter which were superseded by the Report No. ix. of the Massachusetts Agricultural Society.

The communication of "A FARMER" has been received, and we will do all in our power to furnish the information he solicits as soon as possible.

CONGRESSIONAL.

IN SENATE.—Dec. 12. The resolution proposing an amendment of the Constitution to authorize the election of the President, &c. by the people had a second reading. A Memorial from Philadelphia, praying for a revision of the Tariff was committed.

Among the petitions received and referred, was one from the daughter of Gen. St. Clair, stating that the Government is indebted to her late father for military services, and praying for relief, and one from Consul Richard O'Brien, praying for a settlement of his accounts, while at Algiers.

Monday, Dec. 12. Mr. Parrot of N. H. moved that the committee on Naval Affairs be instructed to report on the expediency of authorizing an additional number of Sloops of War to be built and equipped. [*Afterwards adopted.*]

Mr. Hayne, of S. C. offered a resolution to propose to the State Legislature an amendment of the constitution, so as to provide for the election of President and Vice President *by the Electors*, and to prevent the election from devolving, in any event, upon the House of Representatives; which was read, passed to a second reading, and ordered to be printed.

Mr. Mason moved that all the resolutions proposing amendments to the Constitution the last and present session, be published in a pamphlet.

The resolution some time since submitted by Mr. Johnson, proposing an inquiry into the expediency of establishing District Courts, and requiring the unanimous opinions of all the Judges, on questions involving the constitutionality of laws, &c. was amended and adopted.

Mr. D'Wolf, of R. I. offered a resolution that the Committee on Commerce and Domestic Manufactures be instructed to inquire into the expediency of allowing a drawback on all articles of domestic manufacture, the raw materials of which are of foreign growth; with leave to report by by bill or otherwise. [*Adopted.*]

HOUSE.—Friday, Dec. 12. Mr. Fuller submitted a resolution requesting the President to communicate in the House a plan for a Peace Establishment of the Navy of the United Statet.

On motion of Mr. Cobb, the Committee of Ways and Means were instructed to report on the expediency of repealing the duty on *Salt*,

On motion of Mr. Whipple, of N. H. the Military Committee was instructed to inquire into the expediency of amending the Militia law, so as to require that the arms sent to each State and Territory shall be deposited and kept in proper arsenals, ready for delivery to the Militia only when called into the actual service of the United States, or the State or Territorial Government, and to be returned to such place or places of deposit, when said service shall cease.

Mr. Cook submitted a resolution for information respecting the recent robbery of the Land Office at Vandalia, in Illinois, and the justice of releasing the Receiver of Public Monies, from liability to the Government for the sum lost by said robbery.

On motion of Mr. Isaacs it was

Resolved, That the Committee on Military Affairs be instructed to inquire into the expediency of so amending the several laws allowing a bounty to enlisted soldiers or their heirs, and also the laws authorizing the commutation of the land bounty for half pay, may be extended to the children of such soldiers who may have been regularly enlisted, but who may have fallen in action, or died before they were mustered into service, as by law is allowed in other cases.

Errata.—We regret that some errors have occurred in that part of the valuable tract on Grasses by Judge BUEL, of Albany, published in our last number. The mistakes existed in the copy from which we took the article, and we hope our readers will take the trouble to correct them with the pen. In the table of Grasses page 161, 1st column 15th line from the top, for "lunatus," please insert *lanatus*. Page 162, 2d column, 8th line from the top, for "I should" insert *sheep*. Next line, for "every" insert *any*. First line in the next paragraph for "facts are" insert *proof is*. Same line for "in favor of," insert "*of the value of.*"

PRICES OF COUNTRY PRODUCE, &c.

[Revised and corrected every Friday.]

		FROM D. C.	TO D. C.
ASHES, pot, 1st sort,	ton.	140	145
pearl do.		135	137
BEANS, white,	bush	90	1 00
BEEF, mess, 200 lbs. new,	bbl.	8 25	8 50
cargo, No 1,		6 75	7
" No 2,		5 50	6
BUTTER, inspect. 1st qual. new	lb.	11	12
" 2d qual.		9	10
CHEESE, new milk		7	10
skimed milk,		3	4
FLAX		8	9
FLAX SEED	bush	83	90
FLOUR, Baltimore, Howard St.	bbl.	7 50	
Genessee,		7 50	
Rye, best		3 75	
GRAIN, Rye	bush	60	
Corn		52	63
Barley		67	70
Oats		40	
HOGS' LARD, 1st sort	lb.	9	10
HOPS, No 1, Inspection of 1823		35	40
LIME,	cask	1 00	1 17
OIL, Linseed, Phil. and Northern	gal.	60	70
PLAISTER PARIS	ton.	4 00	4 50
PORK, Bone Middlings new,	bbl.	14 50	15 00
NAVY, mess,		12 50	
Cargo, No 1,		11 75	12
Cargo, No 2,	bush	11 00	11 25
SEEDS, Herd's Grass, 1822,	lb.	2 00	
Clover		7	8
WOOL, Merino, full blood, washed		58	70
do do unwashed		37	40
do 3-4 washed		45	50
do 1-2 do		37	40
Native do		31	33
Pulled, Lamb's, 1st sort		50	00
do Spinning, 1st sort		40	42
PROVISION MARKET.	lb.		
BEEF, best pieces		7	10
PORK, fresh		5	7
VEAL,		3	8
MUTTON and LAMB,		2	8
POULTRY,		5	8
BUTTER, keg & tub, family,		15	18
lump, best		17	20
EGGS,	doz.	16	20
MEAL, Rye,	bush	70	
Indian,		65	70
POTATOES,		30	37
CIDER, liquor, new	bbl.	2	50
HAY, according to quality,	ton.	10	00 00

From the Old Colony Memorial.

THE COOKING STOVE.

Did you ever see a cooking stove, Cate?
Why no; but I've heard much about one,
They have grown much in fashion of late,
And some think they can't do without one.

There are others, who think they are dark
And dismal, unsocial and dull:
Of the fire you can see not a spark,
Though it roars full as loud as a bull.

And then while you're a cooking, they say,
Such a fogo beclouds all the room,
That the girls have to group out the way,
In search of the tongs or the broom.

There's the odour and stench of the boiler,
And the smell of the hot burning fat,
And the smoke of the steak on the broiler;
By jingo, I couldn't bear that!

Beside, who could e'er think of eating
A sirloin, a turkey, or goose,
That is baked, like a pumpkin or sweeting,
By the heat of this stinking cambouse?

But, hark ye, now Cate, while I mention,
'Tis prejudice instigates those,
Who decry this most useful invention,'
Why, it is just like the *tale of the crows.*

I tell you, their gabble and prate,
Are nothing but bother and blarney,
If you doubt what I say, my dear Cate,
Enquire of uncle *Jo Carney.*

He has had one this twelve month or more;
He says there is surely a saving;
He has tried it a hundred times o'er,
And he knows the expense to a shaving.

The labor of cooking is less;
No burning your brains, while you're frying;
No shivering children, half drest,
Crowd under the mantle-tree, crying.

Of wood too, ah, there is the rub!
You save full one third in the burning,
While you're warm as a cat or a cub,
In a chilling and freezing cold morning.

This darkness and gloom is a hum,
For only just open the door,
You can see all over the room,
To pick up a pin on the floor.

And as for the smoke of the fat,
Of the steak, and the sausage, and tripe;
The fogo and stench, and all that,
Why, it passes all off in a pipe.

The roasting, which some have called baking,
The oven is managed so well,
The diff'rence, if he were partaking,
Epicurus himself could'nt tell.

Now, Caty, this thing, so derided
By those who know nought of its use,
Its worth would have proved, had they tried it,
Nor suffered so wrongful abuse.

So, here is an end on't, dear honey;
And if you are minded to try one,
I'll step out and saddle our poney,
And ride over to Rich's and buy one.

CHARLEY MCCOMFORT.

BEAR AND FORBEAR.

Bear and *forbear*, thus preach the soundest sages,
And in two words include the sense of pages;
With patience *bear* life's certain ills—and, O!
Forbear those pleasures which must end in woe!

MISCELLANY.

ANECDOTES.

An Expeditious Workman.—A Carpenter being at work near the top of a building, stepped on a board not strong enough to bear his whole weight, fell through the floor and broke his leg. A bye stander pretending to comfort him, said, that though he had made a bad job of that business, it must be acknowledged that nobody could *go through his work* more expeditiously.

Money in the Bank.—A miser having carefully deposited his darling treasure in a bank of earth under a hedge,—in one of his visits to the spot, which contained all his hopes, found his money gone. His lamentations attracted several persons, when a wag, who had more wit than feeling, observed that it "was very surprising that the old gentleman should lose his money, as it was put into the *Bank.*"

The Citizen.—A constant frequenter of city feasts having grown very corpulent, it was proposed to write on his back, "*Widened at the expense of the corporation.*"

Eulogy on Punning.—A gentleman observed to Mr. Henry Erskine, a great punster, that punning is the *lowest* sort of wit. "It is so" answered he, "and therefore the *foundation* of all wit."

A hint to snuff Takers.—A woman asked a Doctor whether taking snuff was not hurtful to the brains? "No," said the Doctor, "for he that has *any brains* will not take snuff."

ALLITERATION ARTFULLY APPLIED.

Sale of a Steed.—Will be sold on Saturday, at the sign of the Sportsman, near the South Meeting House in Salisbury, at six o'clock, P. M. the celebrated Steed Swift-Sure. The following is the sum and substance of the string of superlatives, which shew his superiority.

Swift-Sure is strong, staunch, steady, stout, sound, safe, sinewy, serviceable, strapping, supple, swift, smart, sightly, sprightly, spirited, sturdy, sleek, sure-footed, of sizeable symmetry, shining-sorrel, square-sided, slender-shouldered, sharp-sighted, steps singularly stately—without strain, spasm, spring-halt, stranguary, sciatica, staggers, scouring, surfeit, swellings, scratches, splint, shuffling, or symptoms of any sort of sickness—not stiff mouthed, shabby coated, sinew-shrunk, saddle-galled, short-winded or shoulder-slipped—has neither spleen, sand-crack, staring coat nor shattered hoofs—not shy, skittish, slow, sluggish, nor stupid—he never slips, strays, stalks, starts, stops, shakes, snuffles, snorts, stumbles, and scarcely or seldom sweats—has a showy, stylish, switch tail, and a safe, strong set of shoes on—can feed on sainfoin, sheaf-oats, straw or spear grass. He was sold six months since for six hundred and sixty six dollars and sixty six cents to Simon Slyboots, of Salem, who has been offered seven hundred and seventy seven dollars and seventy seven cents in silver for this superb stud-horse.

SIMEON STUMPEMALL.

The Shakers.—Amidst all the singularities of the Shakers, they have some rules which it would be well for all denominations to adopt: "It is contrary to order, or the gift, as they call it, (says Professor Silliman, in his Tour,) to leave any bars down or gates open, or leave any thing they use out of its proper place; consequently, they seldom have any thing lost. It is according to the gift, or order for all to endeavor to keep all things in order; indolence and carelessness, they say, are directly opposite to the gospel and order of God; cleanliness, in every respect is strongly enforced: it is contrary to order even to spit on the floor. A dirty, careless, slovenly or indolent person, they say cannot travel in the way of God, or be religious. It is contrary to order to talk loud, to shut doors hard, to rap at a door for admittance, or to make a noise in any respect; even when walking the floor, they must be careful not to make a noise with their feet. They go to bed at 9 or 10 o'clock and rise at 4 or 5. Every man and woman must be employed and work steadily and moderately." Trifling as these rules may appear, their adoption would have a very important effect upon any household or community.

Punishment for reading the word of God in the days of popery.—In the parliament held at Leicester, in A. D. 1415, it was enacted, "That whosoever they were that should read the scriptures in the mother tongue, (which was then called Wickliffe's learning) they should forfeit lands, cattle, body, life, and goods, from their heirs forever; and so be condemned heretics to God, enemies to the crown, and most errant traitors to the land." Besides this, it was enacted, "That neither a sanctuary nor privileged ground within the realm should hold them, though they were still permitted to thieves and murderers. And, if in case they would not go over, or were after their pardon relapsed, they should suffer death in two manner of kinds; that is they should first be hanged, and then be burned for heresy against God, and yet neither of both committed."—*Townley's Illustrations of Biblical Literature.*

In England, Mr. Beckford, aged 65, has lately bought the Landsdown Farm, to lay it out in a new manner with forest and fruit trees, &c. A man should either in some degree designedly work for posterity, or be unconscious of his age. It is pleasant to see an aged farmer planting trees and ordering stone walls—or a venerable citizen building granite and iron. It shews something opposite to selfishness.

Canal Revenue.—Eleven hundred dollars, not long since, were received for tolls upon the Canal, in one day, at Albany.

Knowledge.—Those who know most are most anxious to know more; but those who know but little think they have little need of knowledge. —*Ed. N. E. Farmer.*

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